

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/541,822

Source: pc/10

Date Processed by STIC: 7/19/05

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PCT

## RAW SEQUENCE LISTING

DATE: 07/19/2005

PATENT APPLICATION: US/10/541,822

TIME: 09:06:42

Input Set : A:\PTO.SR.txt

Output Set: N:\CRF4\07192005\J541822.raw

3 <110> APPLICANT: NATIONAL UNIVERSITY CORPORATION KAGAWA UNIVERSITY  
 5 <120> TITLE OF INVENTION: GENE SEQUENCE OF L-RHAMNOSE ISOMERASE HAVING NEW CATALYTIC  
 FUNCTION AND  
 6 USE THEREOF  
 8 <130> FILE REFERENCE: PCT-04-IT01  
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/541,822  
 C--> 11 <141> CURRENT FILING DATE: 2005-07-11  
 13 <150> PRIOR APPLICATION NUMBER: JP2003-005041  
 14 <151> PRIOR FILING DATE: 2003-01-10  
 16 <150> PRIOR APPLICATION NUMBER: JP2003-096046  
 17 <151> PRIOR FILING DATE: 2003-03-31  
 19 <150> PRIOR APPLICATION NUMBER: JP2003-299371  
 20 <151> PRIOR FILING DATE: 2003-08-22  
 22 <160> NUMBER OF SEQ ID NOS: 2  
 24 <170> SOFTWARE: PatentIn version 3.1  
 26 <210> SEQ ID NO: 1  
 27 <211> LENGTH: 1290  
 28 <212> TYPE: DNA  
 29 <213> ORGANISM: Pseudomonas stutzerii  
 31 <400> SEQUENCE: 1  
 32 atggctgaat tcaggatcgc tcaggatgtc gttgcgcggg aaaacgcacg gcgcgcctcg 60  
 34 gcgctgaagg aagactacga ggcgctcggc gcgaatctcg cccgccgtgg cgtcgacatc 120  
 36 gagggcggtca cggccaaggt cgaaaagtgc ttctgcgcgg tcccctcctg gggcgctcggc 180  
 38 acgggcggcga cgcgctttgc gcgcttcccc ggccaccggc agccgcgcgg catcttcgac 240  
 40 aagctggacg actgcgccgt catccagcag ctgacacgcg ccacgcccac tgtctcgtcg 300  
 42 catattccgt gggacaaggc cgatccgaag gagctgaagg ccaggggcga cgccctcggc 360  
 44 ctgcgcttcg acgcgatgaa ctccaatacc ttctccgatg cgcccggcca ggcgcatctc 420  
 46 tacaaatacg gctcgcctcag ccacacggat gcggcaacgc gcgcccaggc ggtcgagcac 480  
 48 aatctggaat gcatcgagat cggcaaggcc atcgggtcca aggcgctgac ggtctggatc 540  
 50 ggtgacggct ccaacttccc cggccagagt aacttcacca gggctttcga acgttatctc 600  
 52 tcggcgatgg cggagatcta caagggcctg ccggatgact ggaagctgtt ctccgagcac 660  
 54 aagatgtacg agccggcctt ctattcgacc gtcgtgcagg actggggcac gaattatctc 720  
 56 atcgcccaga cgctcgcccc caaggccag tgctcgtcg atctcgcca tcacgcgcgg 780  
 58 aacaccaata tcgagatgat cgctcgcccc ctcattccagt tcggcaagct cggcggttc 840  
 60 catttcaacg attccaaata cggcgacgac gacctcgatg ccggcgccat cgagccctat 900  
 62 cgctctttcc tcgtcttcaa cgagctggtg gatgcggagg cgcgcgcggt caagggttc 960  
 64 caccgggcc acatgatcga ccagtcgcac aacgtcaccg acccgatcga gagcctgatc 1020  
 66 aacagcgcga acgaaatccg tcgcgcctat gcgcaggccc tccttgctga ccgcgcggcg 1080  
 68 ctttccggct accaggagga caacgacgcc ctgatggcga cggaaacgtt gaagcgcgcc 1140  
 70 taccgtaccg atgtggagcc gatcctcgcc gagggcccgc gccgcacggg cggcgccgtc 1200  
 72 gaccccgctc cgacctatcg ggccagcggc taccgcgcca gggtcgcccgc cgagcgcccc 1260  
 74 gcctccgctc cgggtggcgg cgccatcatc  
 77 <210> SEQ ID NO: 2  
 78 <211> LENGTH: 430

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79 <212> TYPE: PRT
80 <213> ORGANISM: Pseudomonas stutzerii
82 <400> SEQUENCE: 2
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85 1 5 10 15
88 Arg Arg Ala Ser Ala Leu Lys Glu Asp Tyr Glu Ala Leu Gly Ala Asn
89 20 25 30
92 Leu Ala Arg Arg Gly Val Asp Ile Glu Ala Val Thr Ala Lys Val Glu
93 35 40 45
96 Lys Phe Phe Val Ala Val Pro Ser Trp Gly Val Gly Thr Gly Gly Thr
97 50 55 60
100 Arg Phe Ala Arg Phe Pro Gly Thr Gly Glu Pro Arg Gly Ile Phe Asp
101 65 70 75 80
104 Lys Leu Asp Asp Cys Ala Val Ile Gln Gln Leu Thr Arg Ala Thr Pro
105 85 90 95
108 Asn Val Ser Leu His Ile Pro Trp Asp Lys Ala Asp Pro Lys Glu Leu
109 100 105 110
112 Lys Ala Arg Gly Asp Ala Leu Gly Leu Gly Phe Asp Ala Met Asn Ser
113 115 120 125
116 Asn Thr Phe Ser Asp Ala Pro Gly Gln Ala His Ser Tyr Lys Tyr Gly
117 130 135 140
120 Ser Leu Ser His Thr Asp Ala Ala Thr Arg Ala Gln Ala Val Glu His
121 145 150 155 160
124 Asn Leu Glu Cys Ile Glu Ile Gly Lys Ala Ile Gly Ser Lys Ala Leu
125 165 170 175
128 Thr Val Trp Ile Gly Asp Gly Ser Asn Phe Pro Gly Gln Ser Asn Phe
129 180 185 190
132 Thr Arg Ala Phe Glu Arg Tyr Leu Ser Ala Met Ala Glu Ile Tyr Lys
133 195 200 205
136 Gly Leu Pro Asp Asp Trp Lys Leu Phe Ser Glu His Lys Met Tyr Glu
137 210 215 220
140 Pro Ala Phe Tyr Ser Thr Val Val Gln Asp Trp Gly Thr Asn Tyr Leu
141 225 230 235 240
144 Ile Ala Gln Thr Leu Gly Pro Lys Ala Gln Cys Leu Val Asp Leu Gly
145 245 250 255
148 His His Ala Pro Asn Thr Asn Ile Glu Met Ile Val Ala Arg Leu Ile
149 260 265 270
152 Gln Phe Gly Lys Leu Gly Gly Phe His Phe Asn Asp Ser Lys Tyr Gly
153 275 280 285
156 Asp Asp Asp Leu Asp Ala Gly Ala Ile Glu Pro Tyr Arg Leu Phe Leu
157 290 295 300
160 Val Phe Asn Glu Leu Val Asp Ala Glu Ala Arg Gly Val Lys Gly Phe
161 305 310 315 320
164 His Pro Ala His Met Ile Asp Gln Ser His Asn Val Thr Asp Pro Ile
165 325 330 335
168 Glu Ser Leu Ile Asn Ser Ala Asn Glu Ile Arg Arg Ala Tyr Ala Gln
169 340 345 350
172 Ala Leu Leu Val Asp Arg Ala Ala Leu Ser Gly Tyr Gln Glu Asp Asn
173 355 360 365

```

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176 Asp Ala Leu Met Ala Thr Glu Thr Leu Lys Arg Ala Tyr Arg Thr Asp
177      370      375      380
180 Val Glu Pro Ile Leu Ala Glu Ala Arg Arg Arg Thr Gly Gly Ala Val
181 385      390      395      400
184 Asp Pro Val Ala Thr Tyr Arg Ala Ser Gly Tyr Arg Ala Arg Val Ala
185      405      410      415
188 Ala Glu Arg Pro Ala Ser Val Ala Gly Gly Gly Gly Ile Ile
189      420      425      430
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**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/541,822

DATE: 07/19/2005

TIME: 09:06:43

Input Set : A:\PTO.SR.txt

Output Set: N:\CRF4\07192005\J541822.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date